

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

1. (currently amended) A network topology distributed discovery method, leveraging functionality of a high-speed communications network, comprising the steps of:

(i) at each of a plurality of data collection node computers being proximal to a network, polling one or more network devices in the network, including:

querying one or more network devices for which the data collection node computer is responsible, and

~~distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby a resulting distributed record compilation comprises~~

creating a distributed network topology database based on record of the querying; and

(ii) importing the distributed network topology database onto at least one performance monitor server computer so as to enable network management.

2. (currently amended) The method according to claim 1, ~~further including the step of locating at least one discovery engine instance on the data collection node computers on a ratio of one engine instance to one central processing unit whereby total number of engine instances is at least two so as to enable~~ wherein the polling step includes the step of:

implementing parallel processing of the distributed network topology database.

3. (currently amended) The method according to claim 1, ~~further including wherein the polling step includes~~ the step of:

launching a vendor specific discovery subroutine upon detection ~~by the system~~ of a non-MIB II standard device so as to query a vendor's private MIB ~~using a vendor-specific algorithm~~.

4. (currently amended) The method according to claim 1, further including the step of:

connecting at least one performance monitor client computer to the network so as to communicate remotely with the performance monitor server computer[[s]].

5. (currently amended) A network topology distributed discovery system, leveraging functionality of a high-speed communications network, comprising:

(i) ~~at least one~~ a plurality of data collection node computers ~~connected to the network for discovering network devices in a network, the data collection node computers being proximal to the network, each including:~~

~~using a plurality of~~ at least one discovery engine instance[[s]] ~~for polling one or more network devices for which the data collection node computer is responsible,~~

~~whereby a distributed network topology database [[is]] created based on record of the polling; and~~

(ii) at least one performance monitor server computer having imported the distributed network topology database whereby network management is enabled.

6. (currently amended) The system according to claim 5, wherein at least one discovery engine instance is located on the data collection node computer[[s]] on a ratio of one engine instance to one central processing unit whereby the total number of engine instances for the system is at least two so as to enable the parallel processing of the network topology database.

7. (currently amended) The system according to claim 5, wherein the discovery engine instance launches a vendor specific discovery subroutine is

launched upon detection ~~by the system~~ of a non-MIB II standard device so as to query a vendor's private MIB ~~using a vendor-specific algorithm.~~

8. (currently amended) The system according to claim 5, wherein at least one performance monitor client computer is connected to the network so as to communicate remotely with the performance monitor server computer[[s]].

9-12. (cancelled)

13. (currently amended) A computer program product for implementing a network topology distributed discovery method, leveraging functionality of a high-speed communications network, the computer program product comprising:

a computer readable medium for storing machine-executable instructions for use in the execution in a computer of the distributed discovery method, the method including the steps of:

(i) at each of a plurality of data collection node computers being proximal to a network, polling one or more network devices in the network, including:

querying the one or more network devices for which the data collection node computer is responsible, and

~~distributing records of discovered network devices using a plurality of discovery engine instances located on at least one data collection node computer whereby a resulting distributed record compilation comprises~~

creating a distributed network topology database based on record of the querying; and

(ii) importing the distributed network topology database onto at least one performance monitor server computer so as to enable network management.

14. (currently amended) The product according to claim 13, wherein ~~at least one discovery engine instance is located on the data collection node computers on a ratio of one engine instance to one central processing unit whereby total number of engine instances is at least two so as to enable~~ the polling step includes the step of:

implementing parallel processing of the network topology database.

15. (currently amended) The product according to claim 13, wherein ~~a vendor specific discovery subroutine is launched~~ the polling step includes the step of:

launching upon detection ~~by the system~~ of a non-MIB II standard device so as to query a vendor's private MIB ~~using a vendor specific algorithm.~~

16. (currently amended) The product according to claim 13, wherein further comprising the step of:

connecting at least one performance monitor client computer ~~is connected~~ to the network so as to communicate remotely with the performance monitor server computer[[s]].